Figure 1

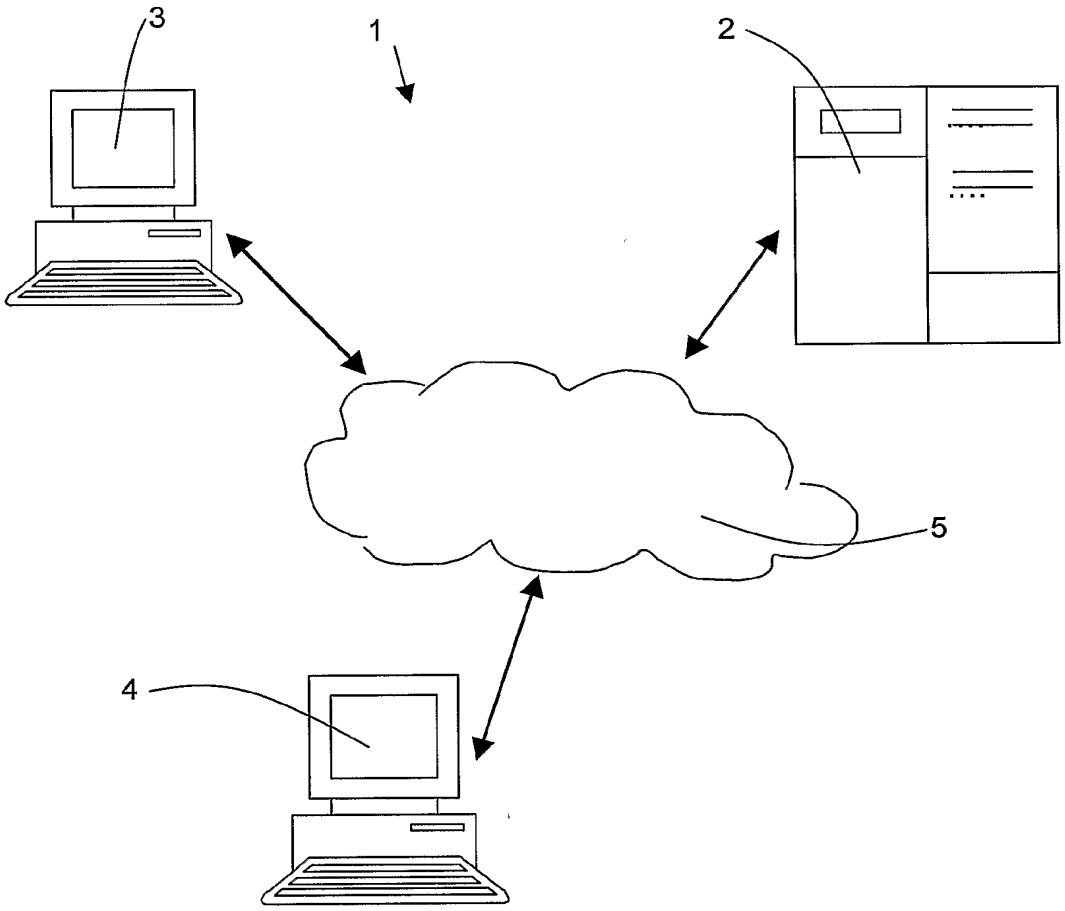

Figure 2

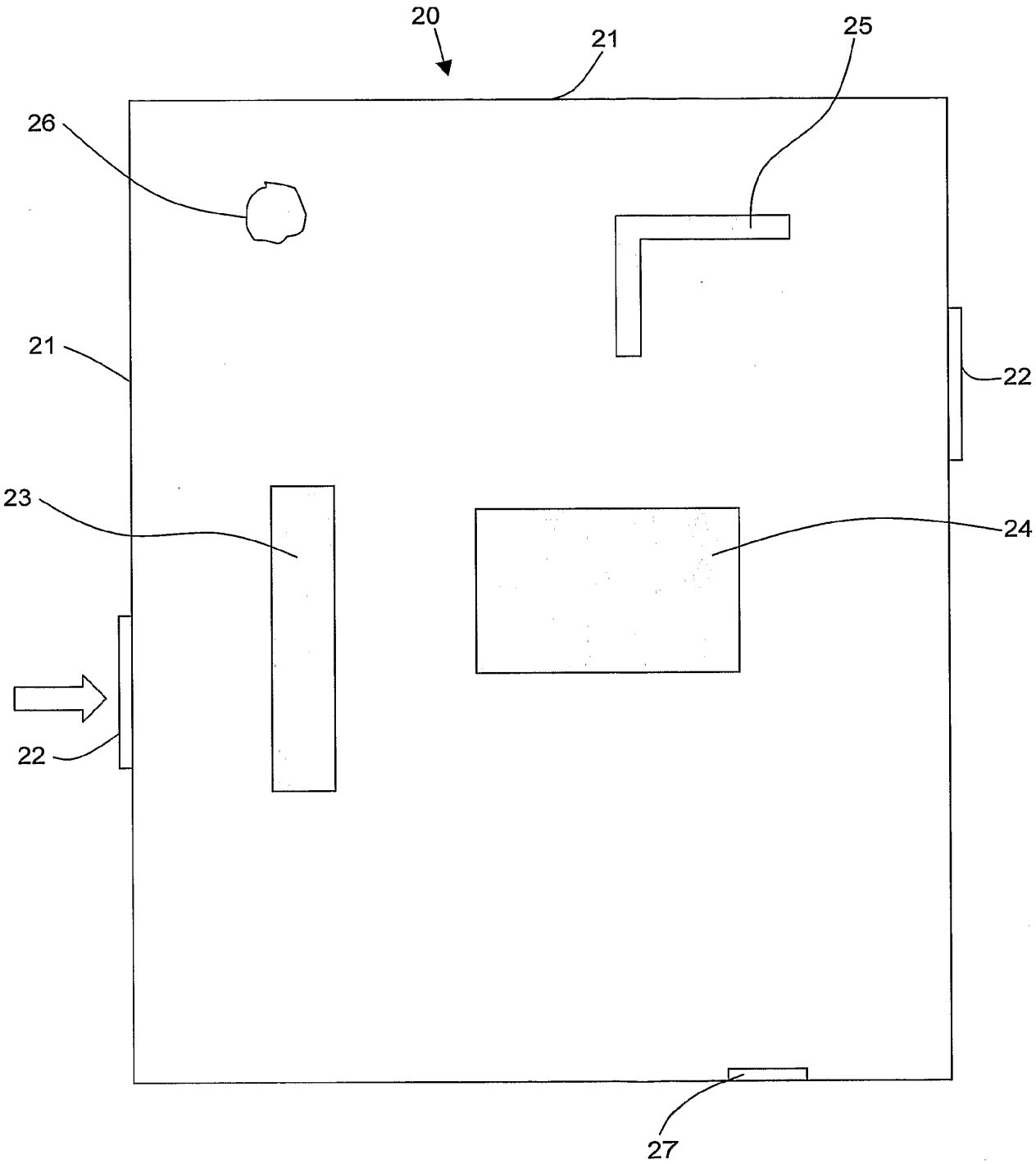

Figure 3

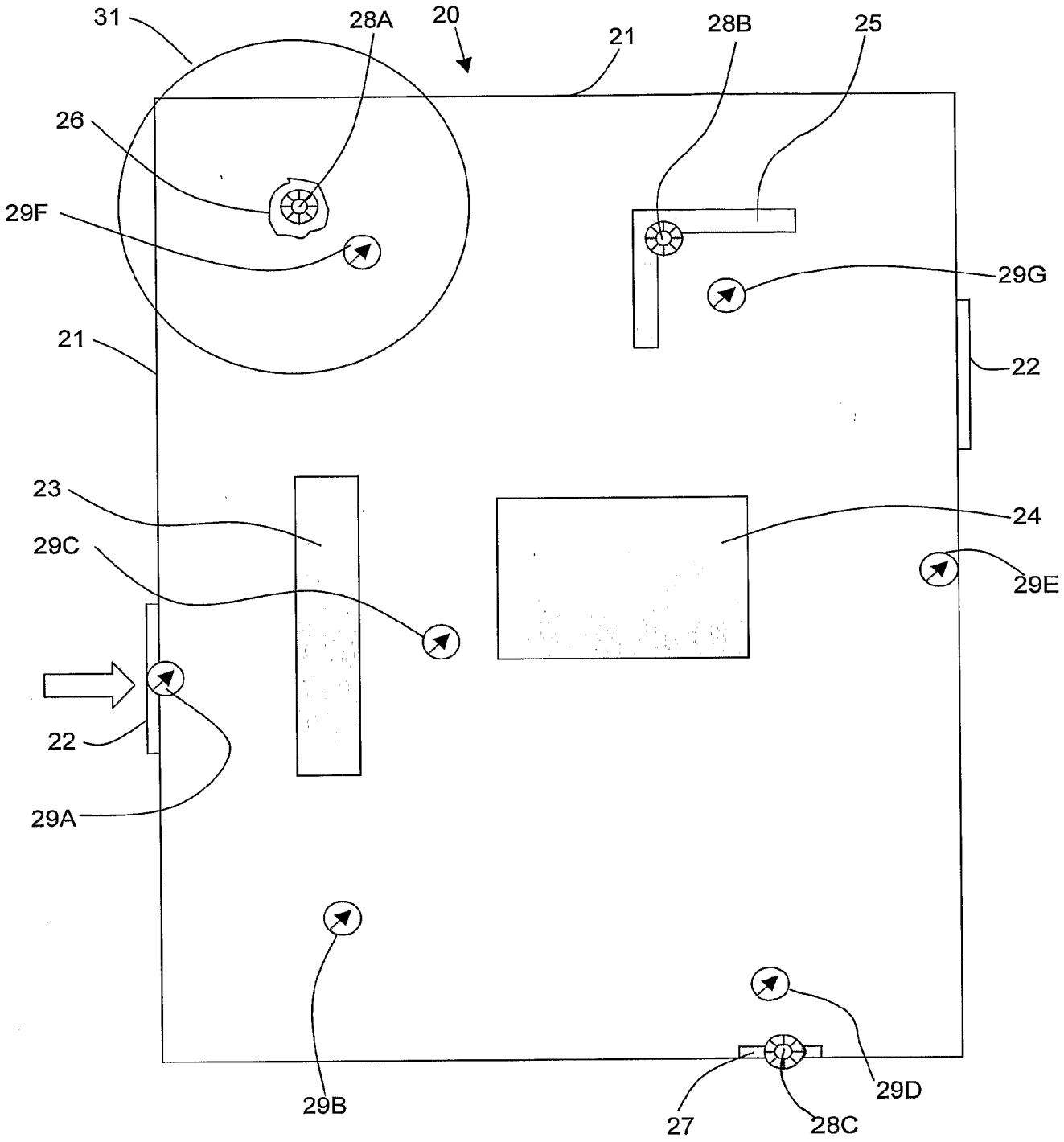
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Figure 4

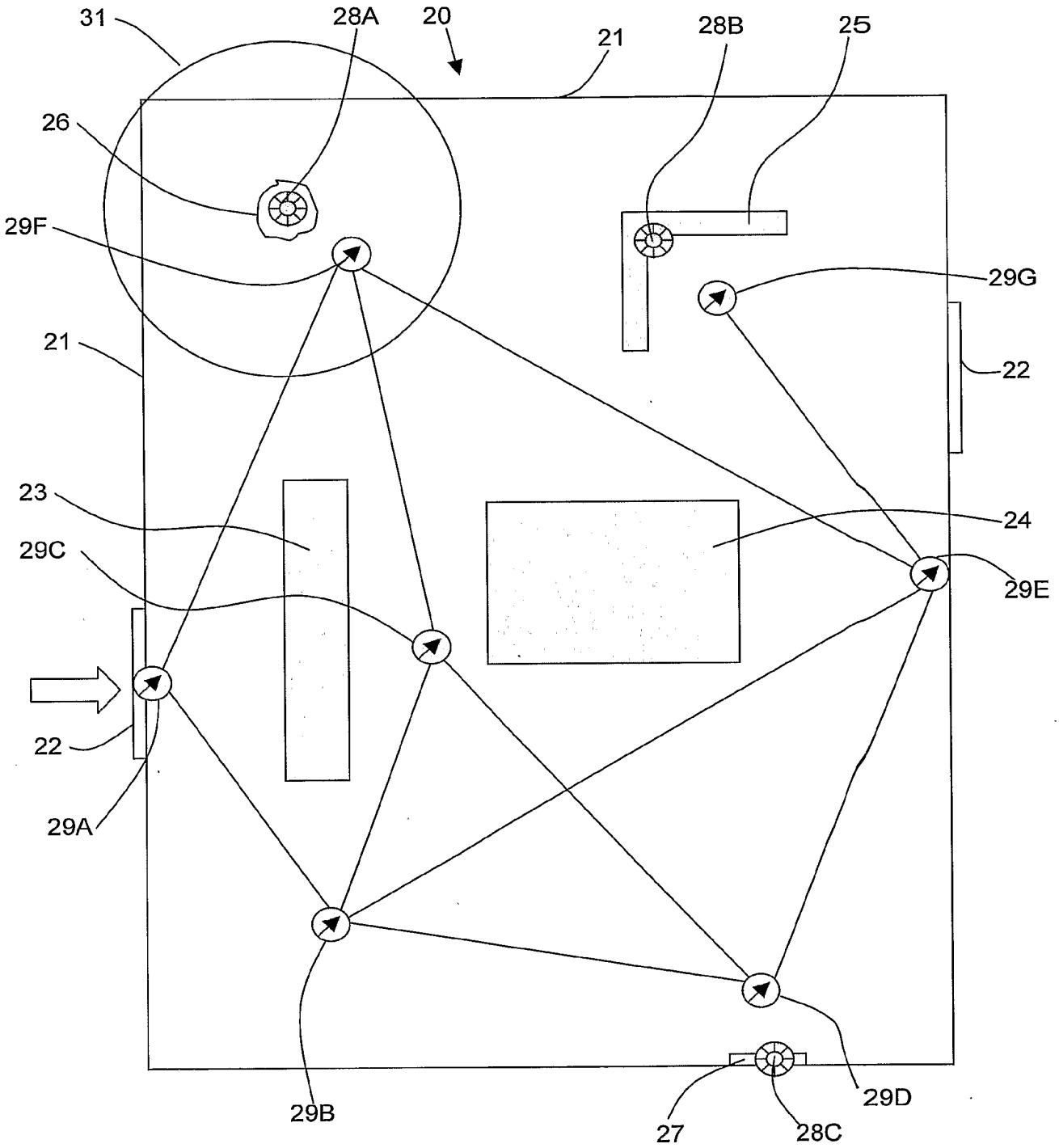
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Figure 5

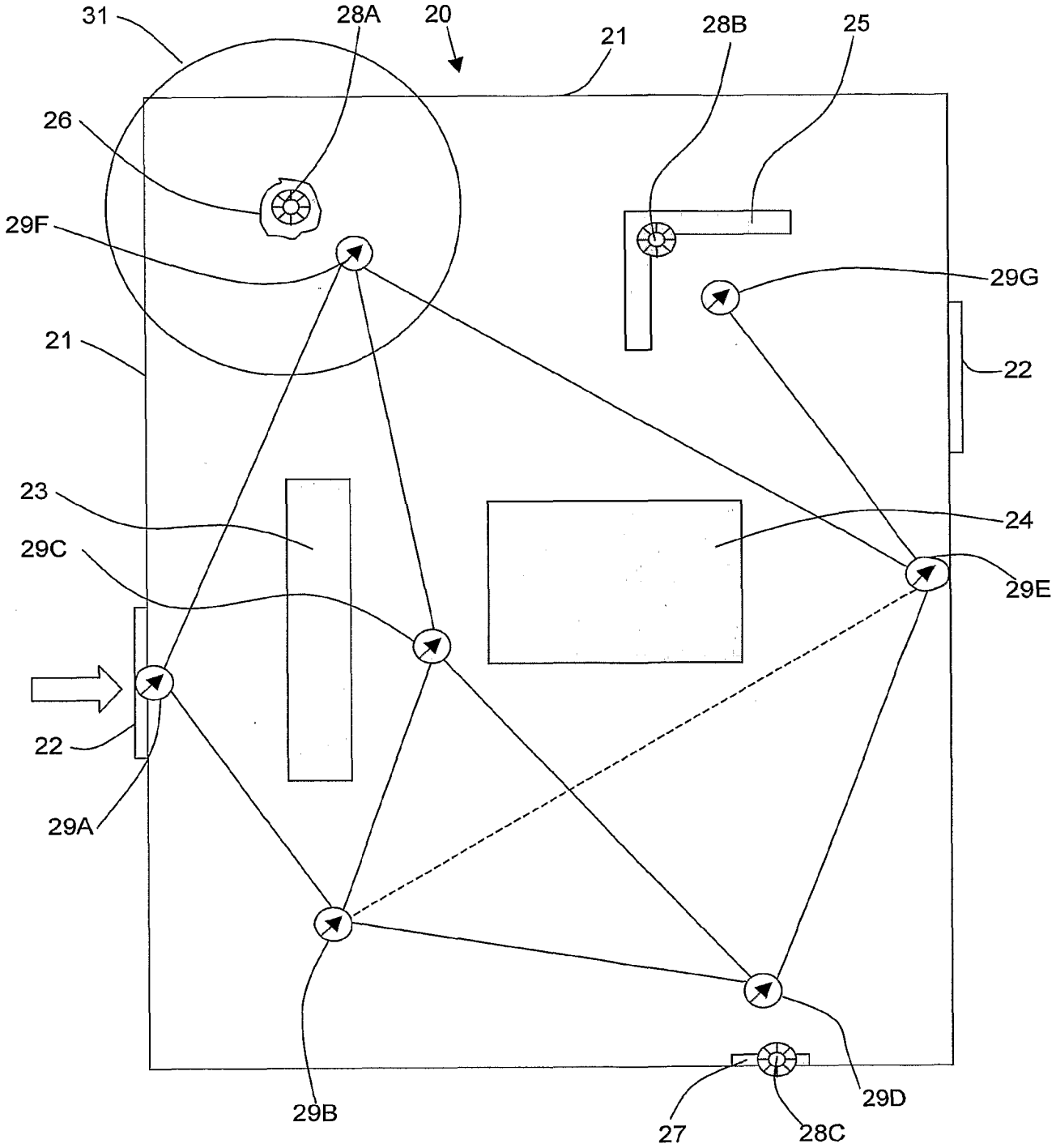
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Figure 6

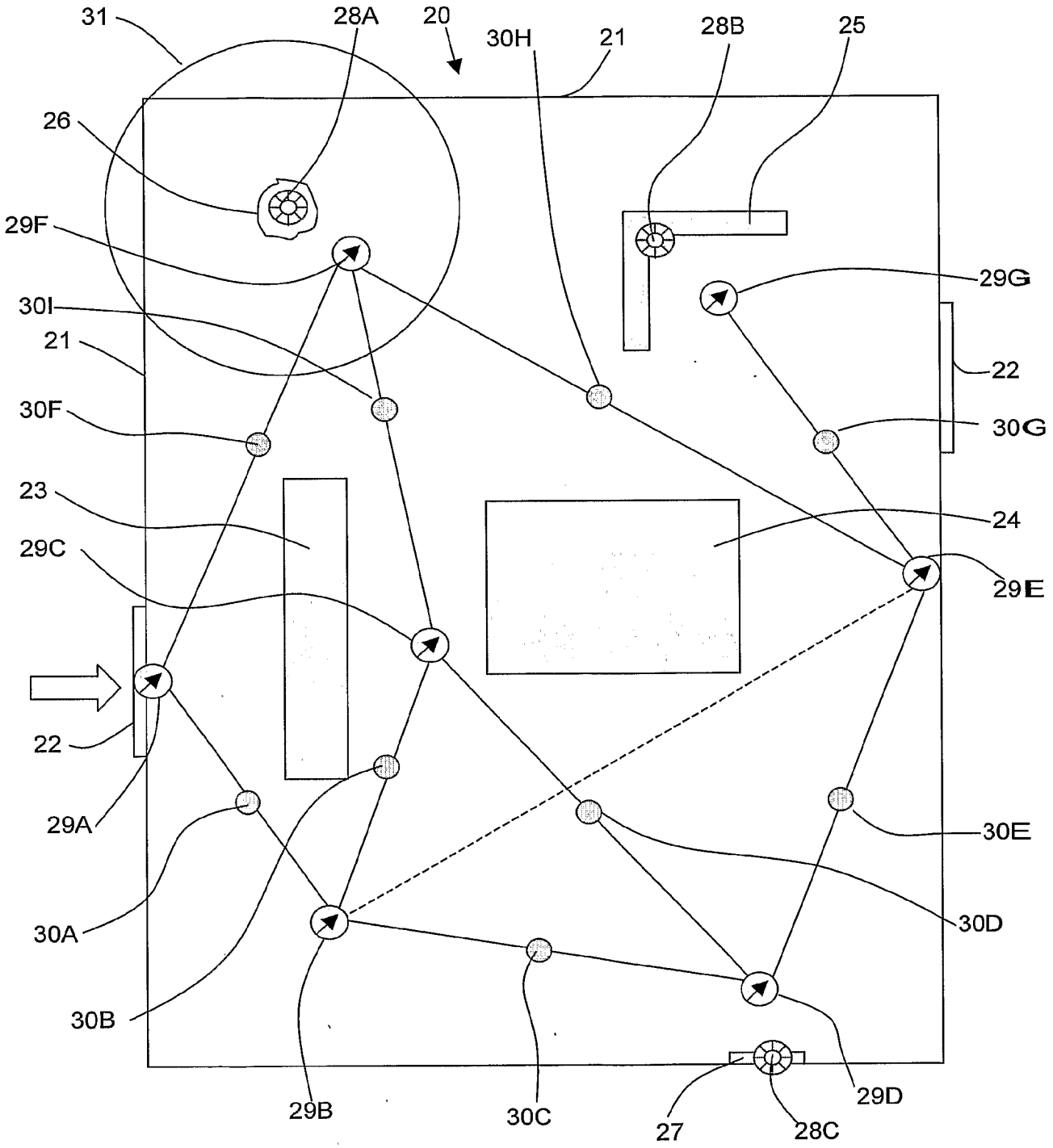
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Figure 7

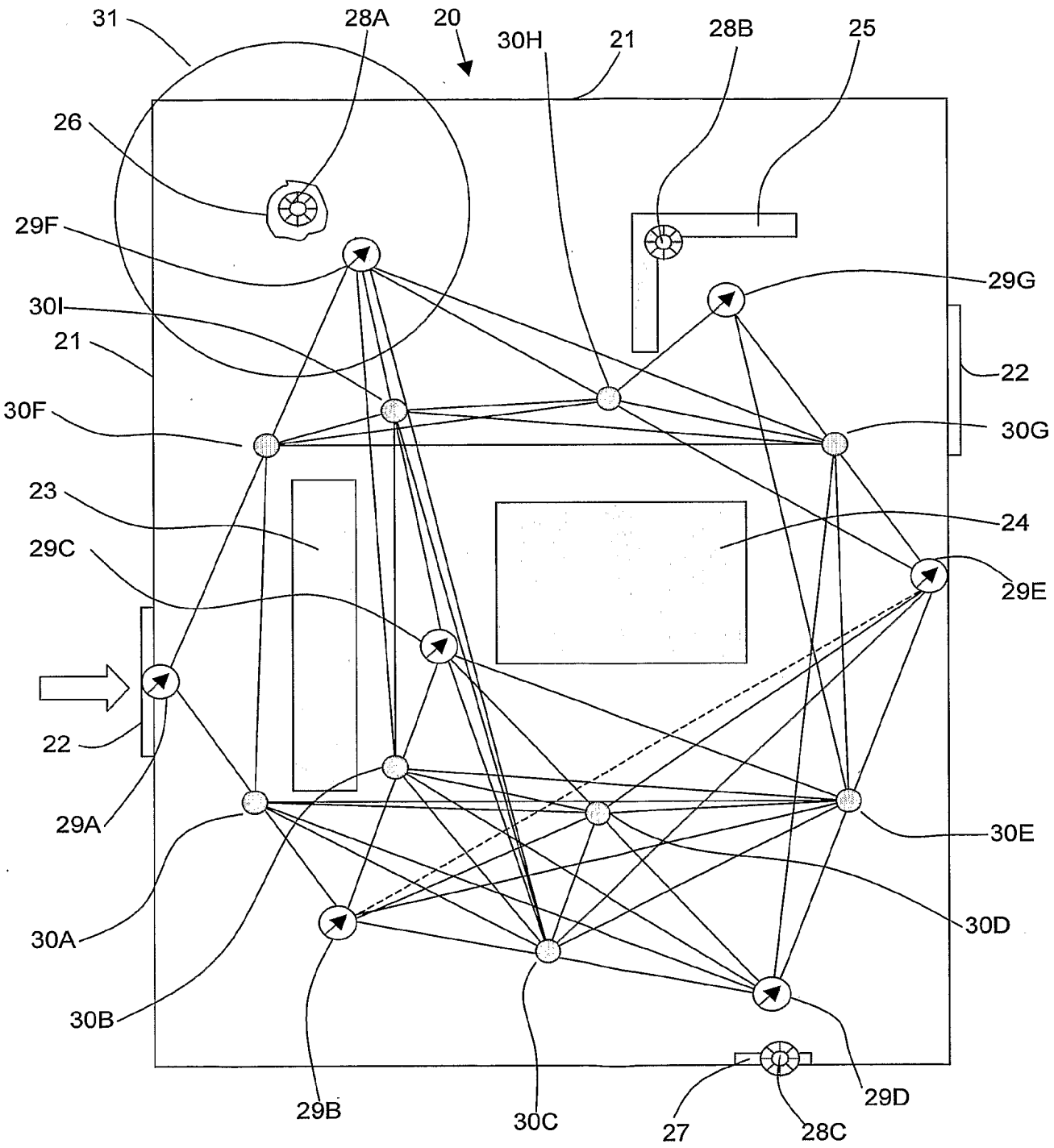
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Figure 8

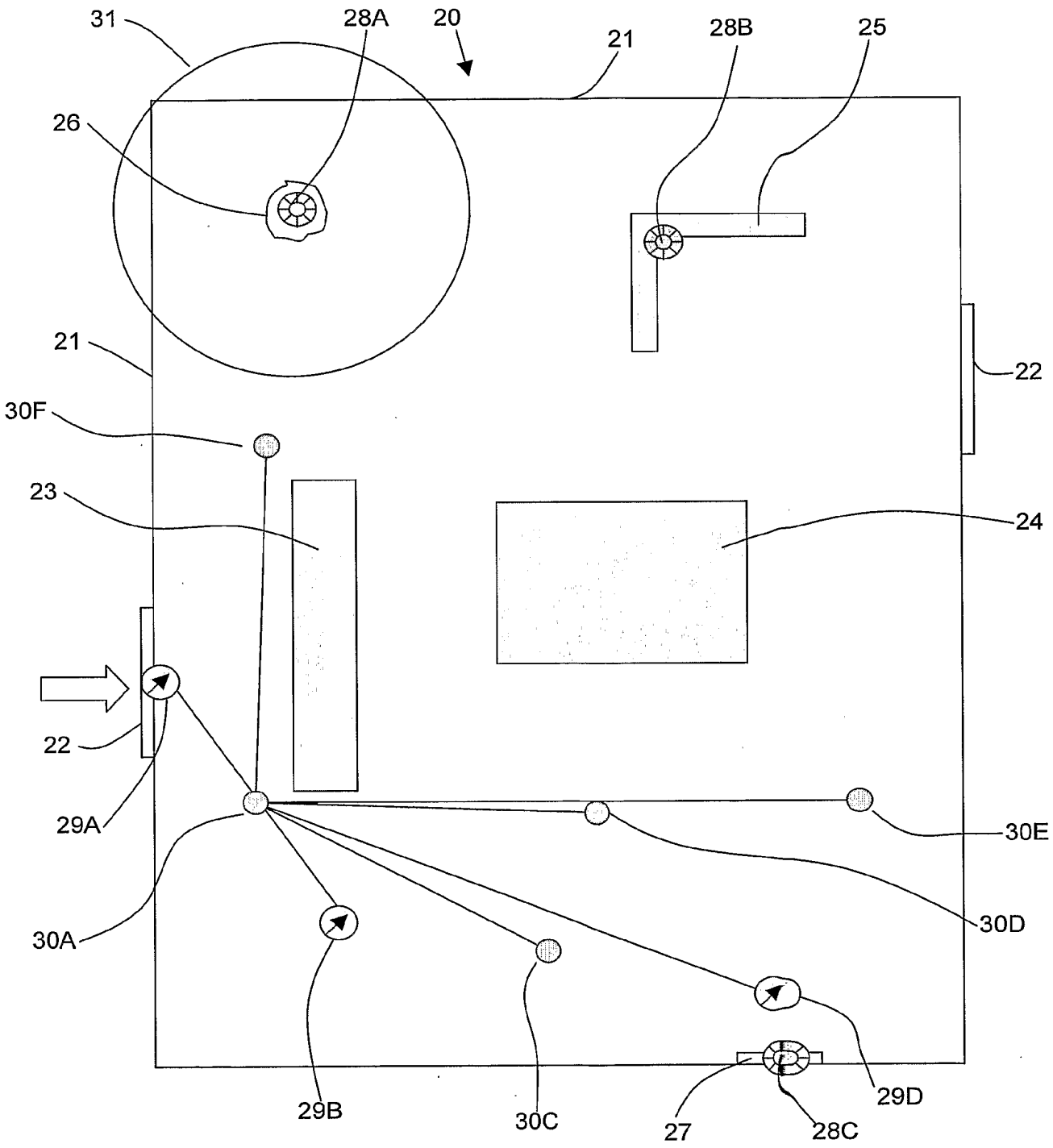
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Figure 9

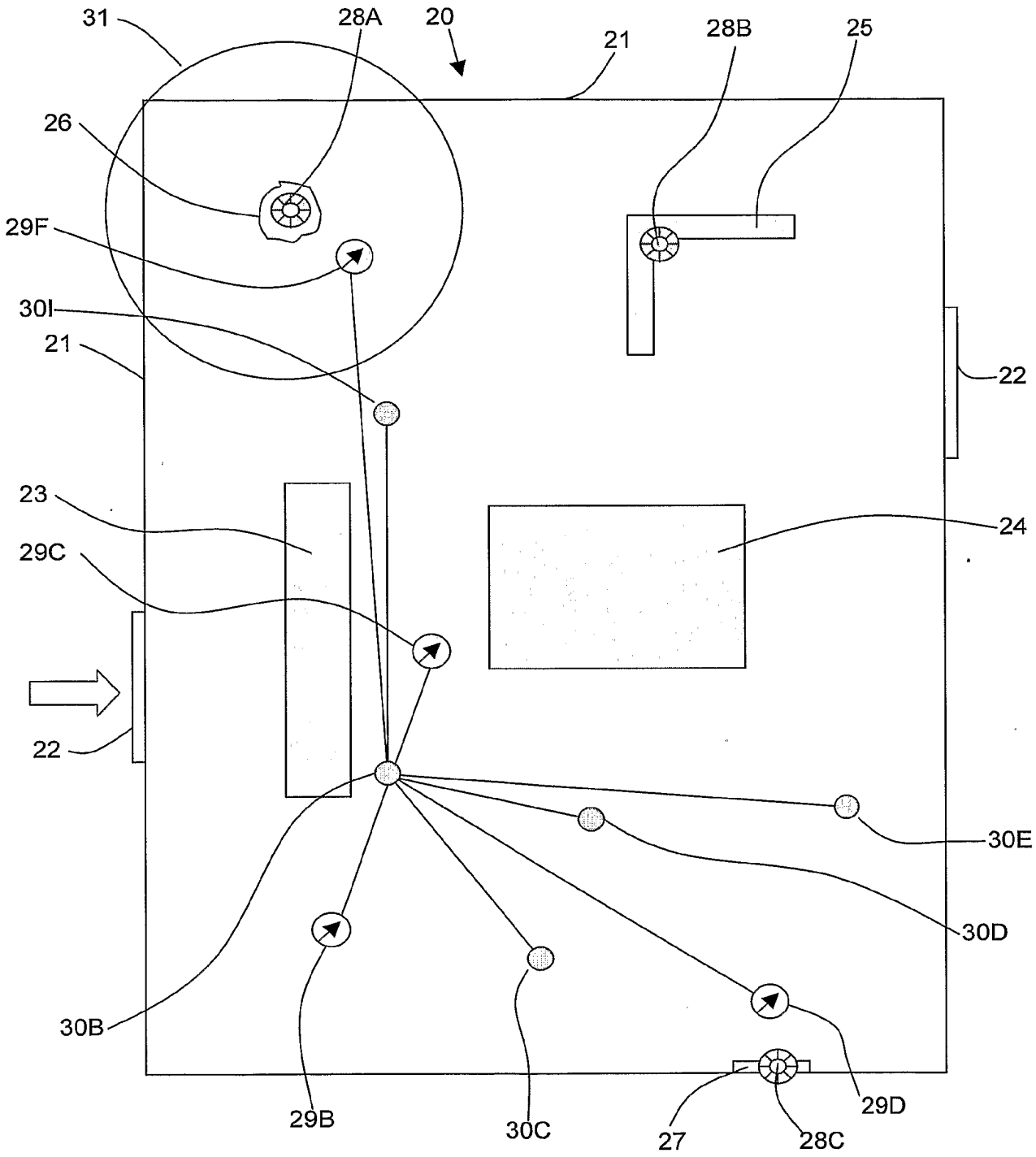
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Figure 10

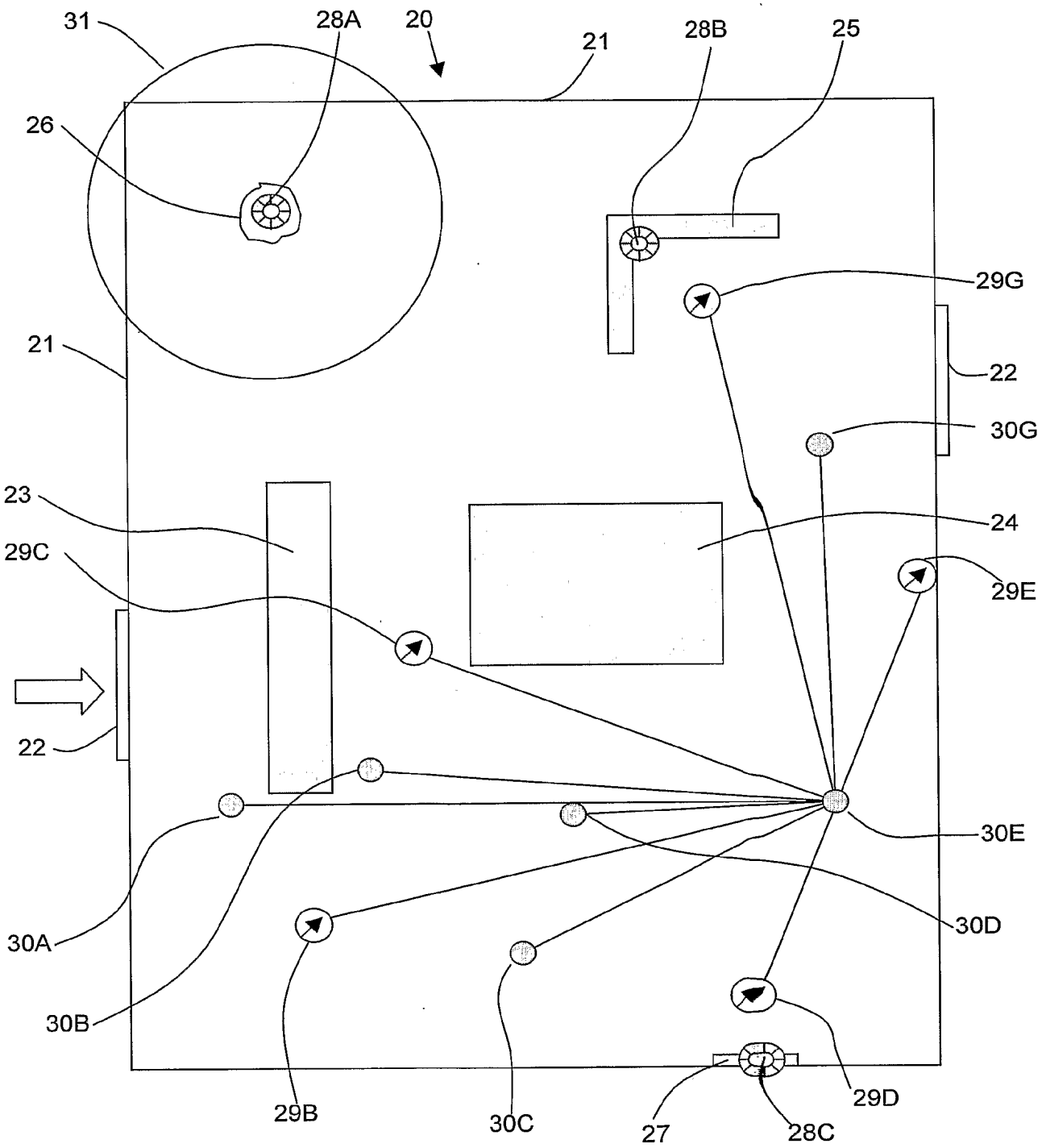
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Figure 11

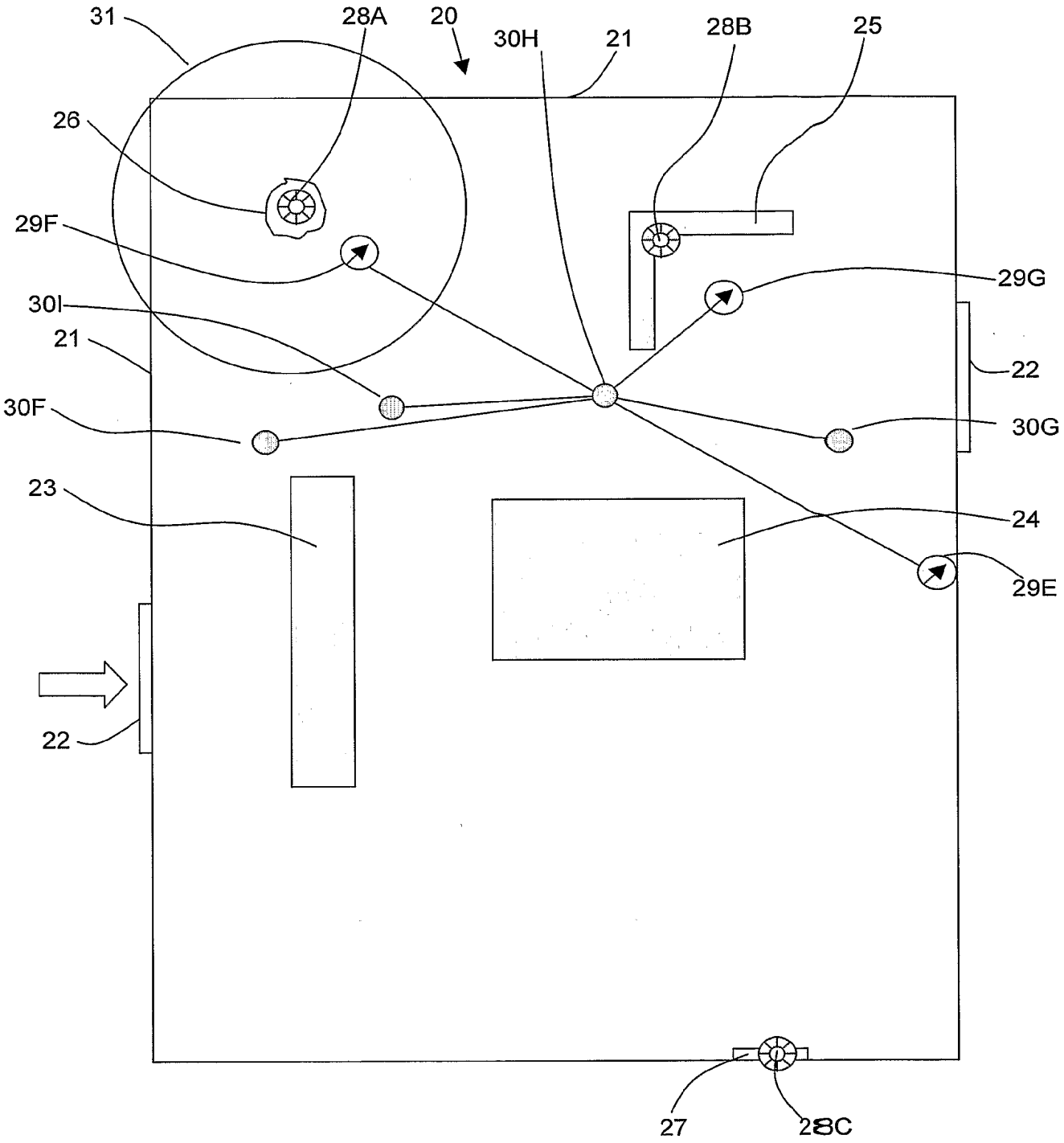
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Figure 12

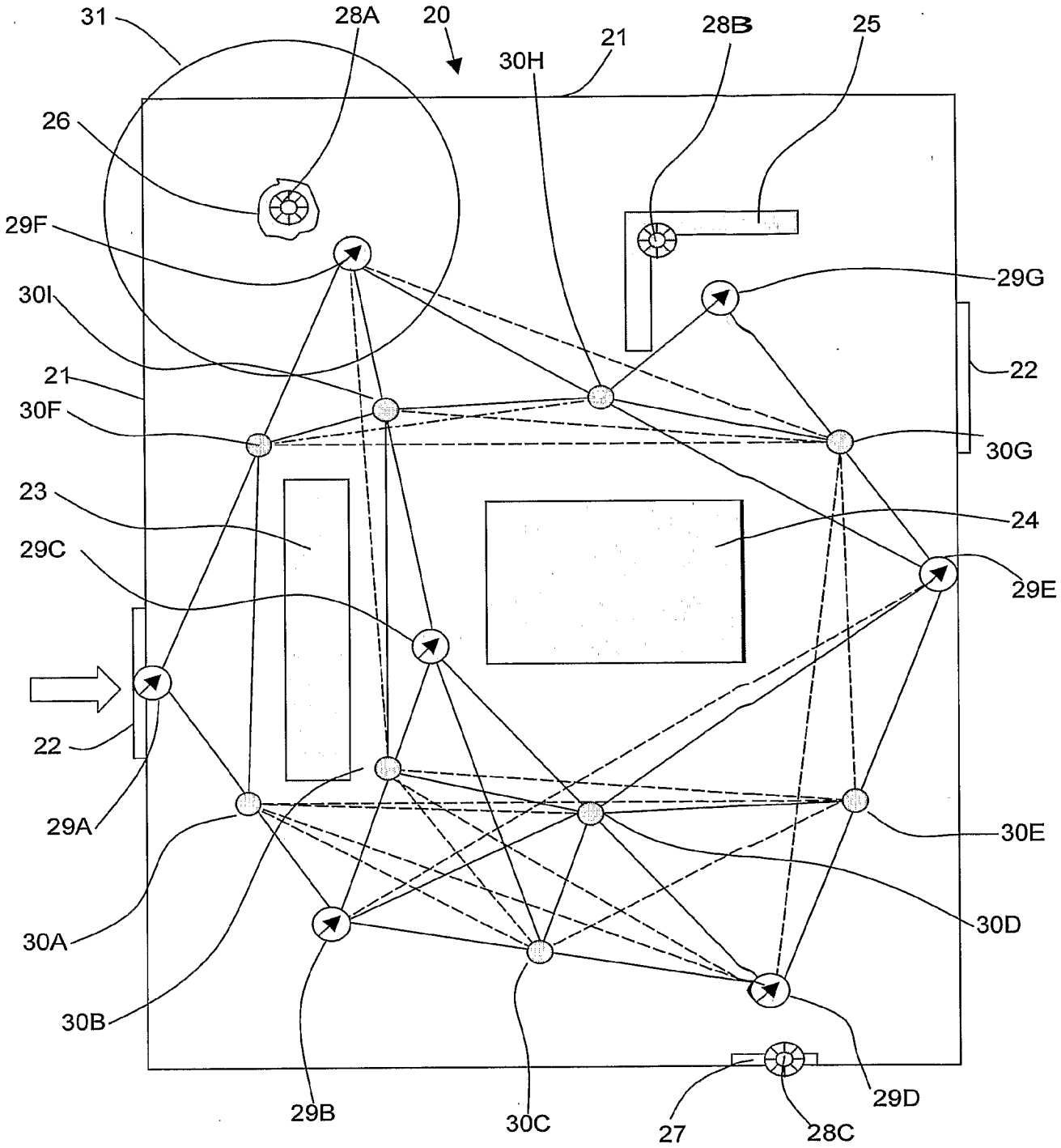
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Figure 13

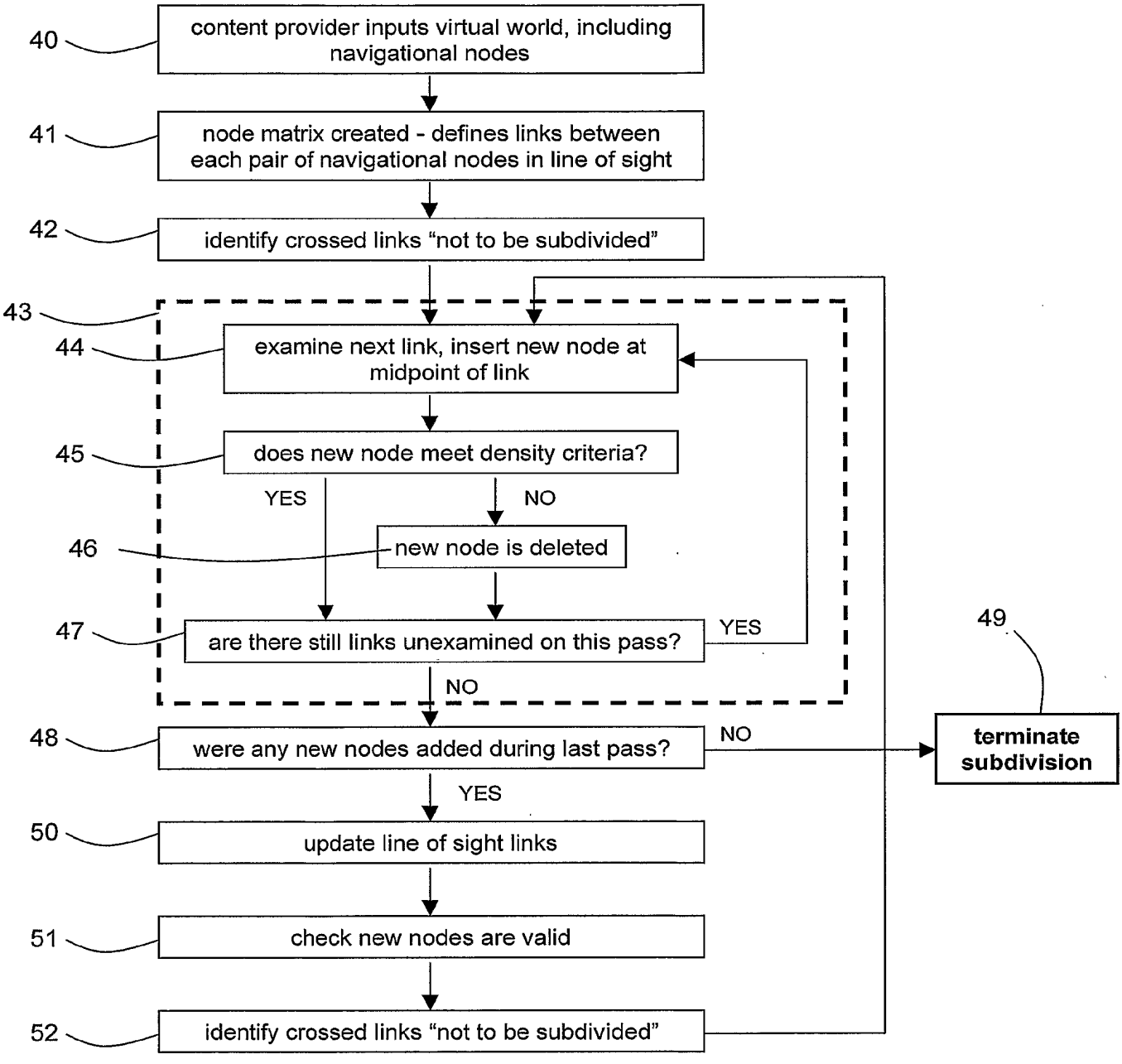

40
content provider inputs virtual world, including navigational nodes
41
node matrix created - defines links between each pair of navigational nodes in line of sight
42
identify crossed links "not to be subdivided"
43
44
examine next link, insert new node at midpoint of link
45
does new node meet density criteria?
YES
NO
46
new node is deleted
47
are there still links unexamined on this pass?
YES
NO
48
were any new nodes added during last pass?
NO
49
terminate subdivision
YES
50
update line of sight links
51
check new nodes are valid
52
identify crossed links "not to be subdivided"

Figure 14

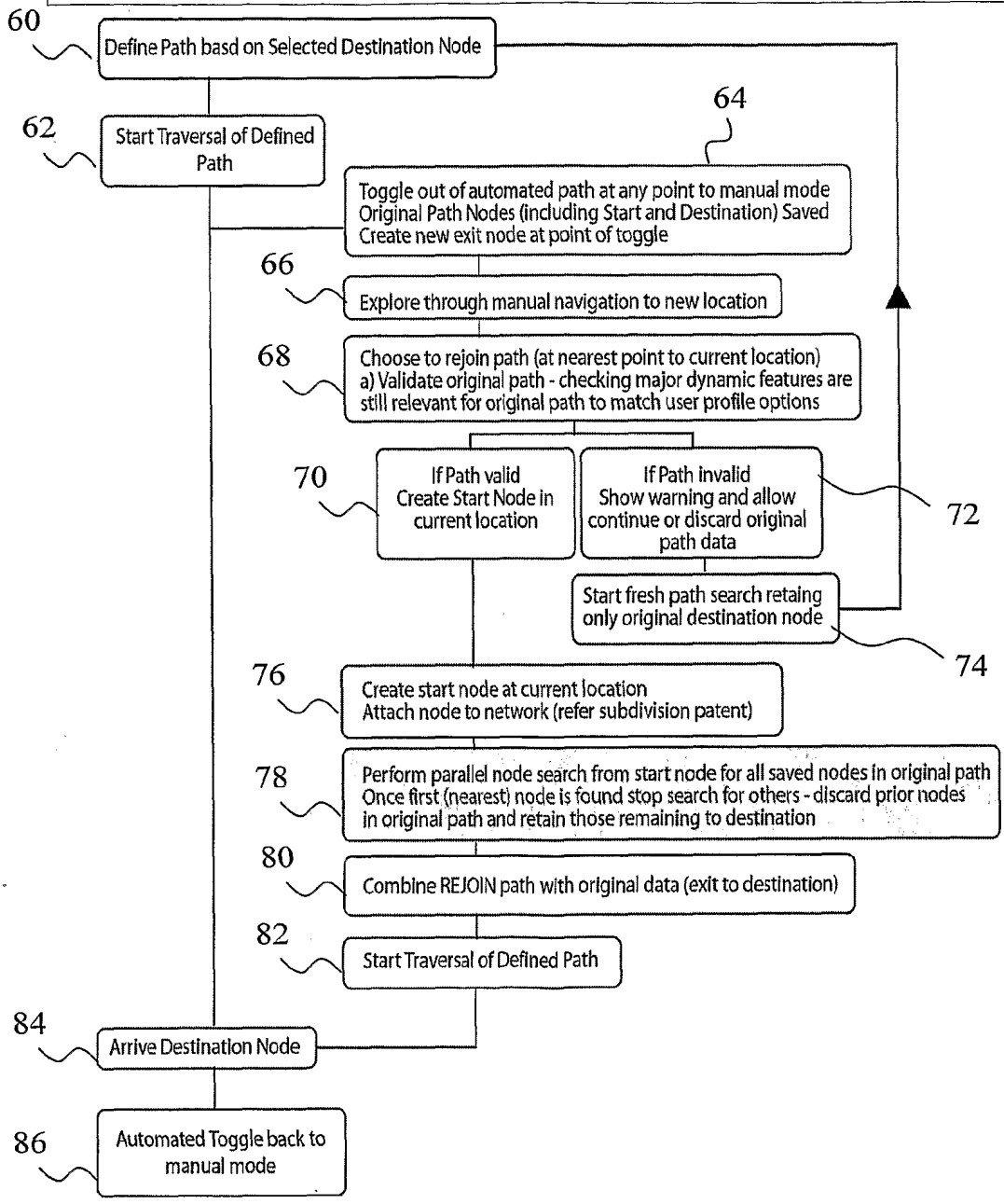

60
Define Path basd on Selected Destination Node
62
Start Traversal of Defined Path
64
Toggle out of automated path at any point to manual mode
Original Path Nodes (including Start and Destination) Saved
Create new exit node at point of toggle
66
Explore through manual navigation to new location
68
Choose to rejoin path (at nearest point to current location)
a) Validate original path - checking major dynamic features are still relevant for original path to match user profile options
70
If Path valid
Create Start Node in current location
If Path invalid
Show warning and allow continue or discard original path data
72
Start fresh path search retaing only original destination node
74
76
Create start node at current location
Attach node to network (refer subdivision patent)
78
Perform parallel node search from start node for all saved nodes in original path
Once first (nearest) node is found stop search for others - discard prior nodes in original path and retain those remaining to destination
80
Combine REJOIN path with original data (exit to destination)
82
Start Traversal of Defined Path
84
Arrive Destination Node
86
Automated Toggle back to manual mode

Figure 15

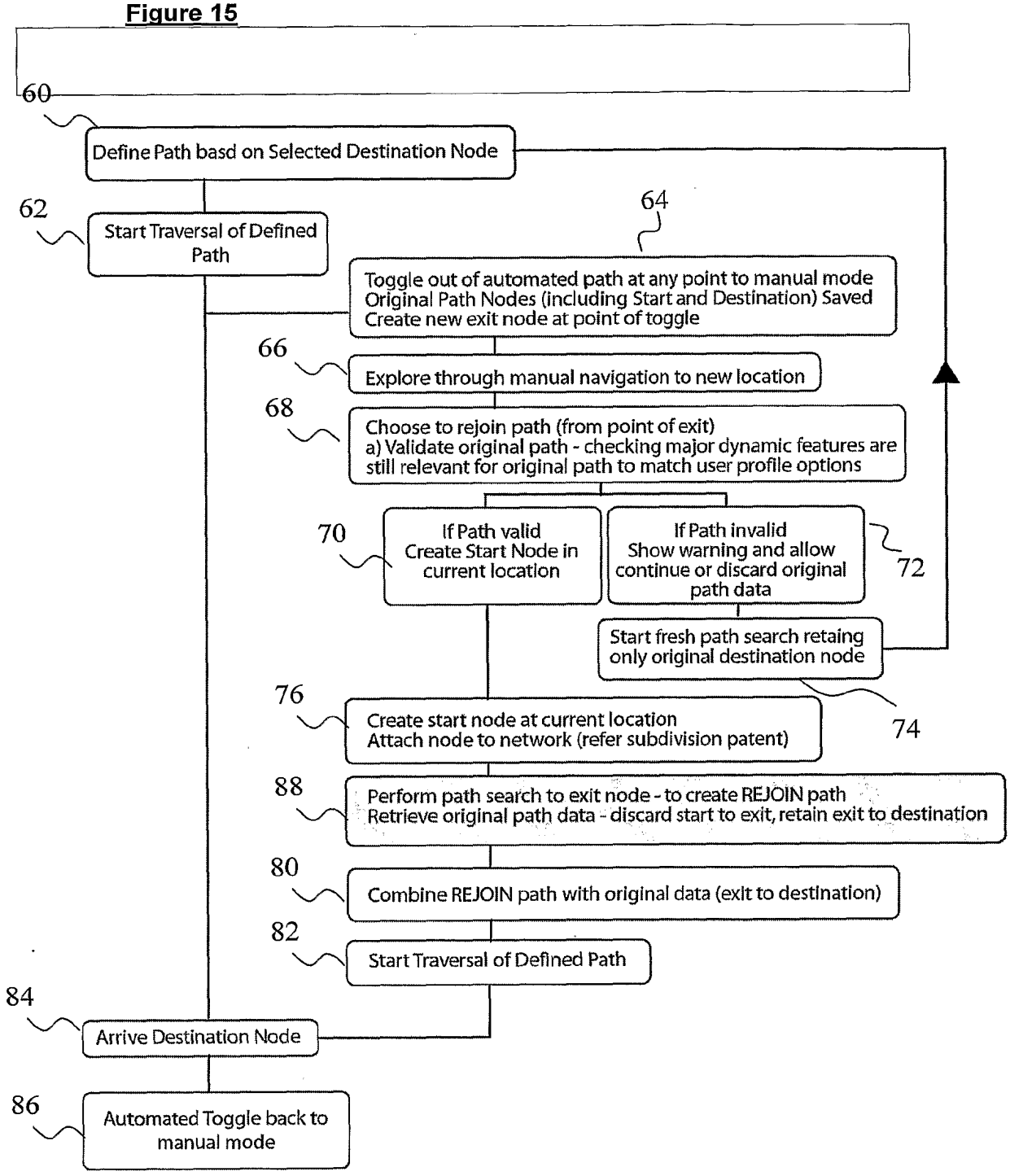

60
Define Path basd on Selected Destination Node
62
Start Traversal of Defined Path
64
Toggle out of automated path at any point to manual mode
Original Path Nodes (including Start and Destination) Saved
Create new exit node at point of toggle
66
Explore through manual navigation to new location
68
Choose to rejoin path (from point of exit)
a) Validate original path - checking major dynamic features are still relevant for original path to match user profile options
70
If Path valid
Create Start Node in current location
If Path invalid
Show warning and allow continue or discard original path data
72
Start fresh path search retaing only original destination node
74
76
Create start node at current location
Attach node to network (refer subdivision patent)
88
Perform path search to exit node - to create REJOIN path
Retrieve original path data - discard start to exit, retain exit to destination
80
Combine REJOIN path with original data (exit to destination)
82
Start Traversal of Defined Path
84
Arrive Destination Node
86
Automated Toggle back to manual mode

Figure 16

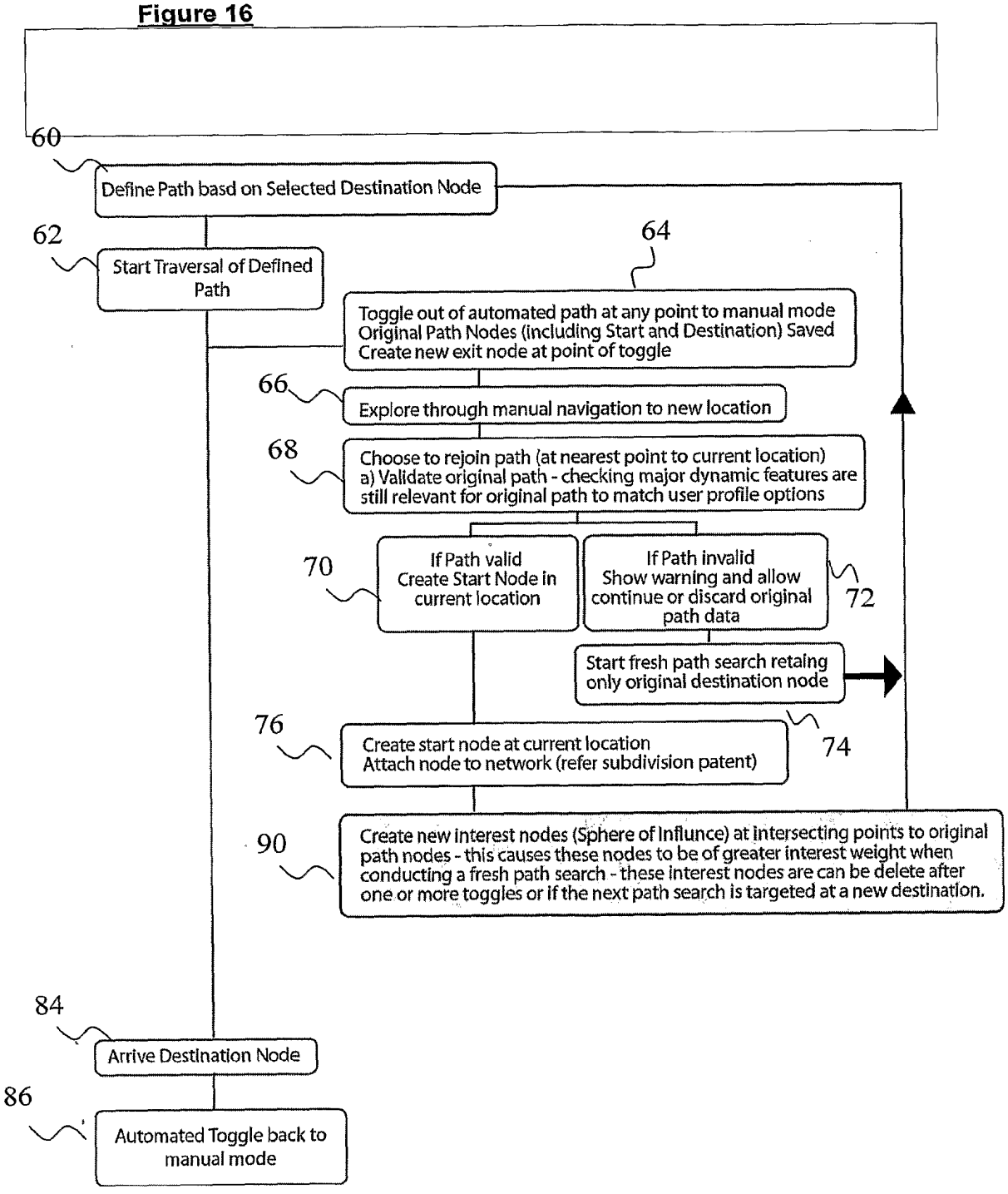

60
Define Path basd on Selected Destination Node
62
Start Traversal of Defined Path
64
Toggle out of automated path at any point to manual mode
Original Path Nodes (including Start and Destination) Saved
Create new exit node at point of toggle
66
Explore through manual navigation to new location
68
Choose to rejoin path (at nearest point to current location)
a) Validate original path - checking major dynamic features are still relevant for original path to match user profile options
70
If Path valid
Create Start Node in current location
If Path invalid
Show warning and allow continue or discard original path data
72
Start fresh path search retaing only original destination node
74
76
Create start node at current location
Attach node to network (refer subdivision patent)
90
Create new interest nodes (Sphere of Influnce) at intersecting points to original path nodes - this causes these nodes to be of greater interest weight when conducting a fresh path search - these interest nodes are can be delete after one or more toggles or if the next path search is targeted at a new destination.
84
Arrive Destination Node
86
Automated Toggle back to manual mode

Figure 17

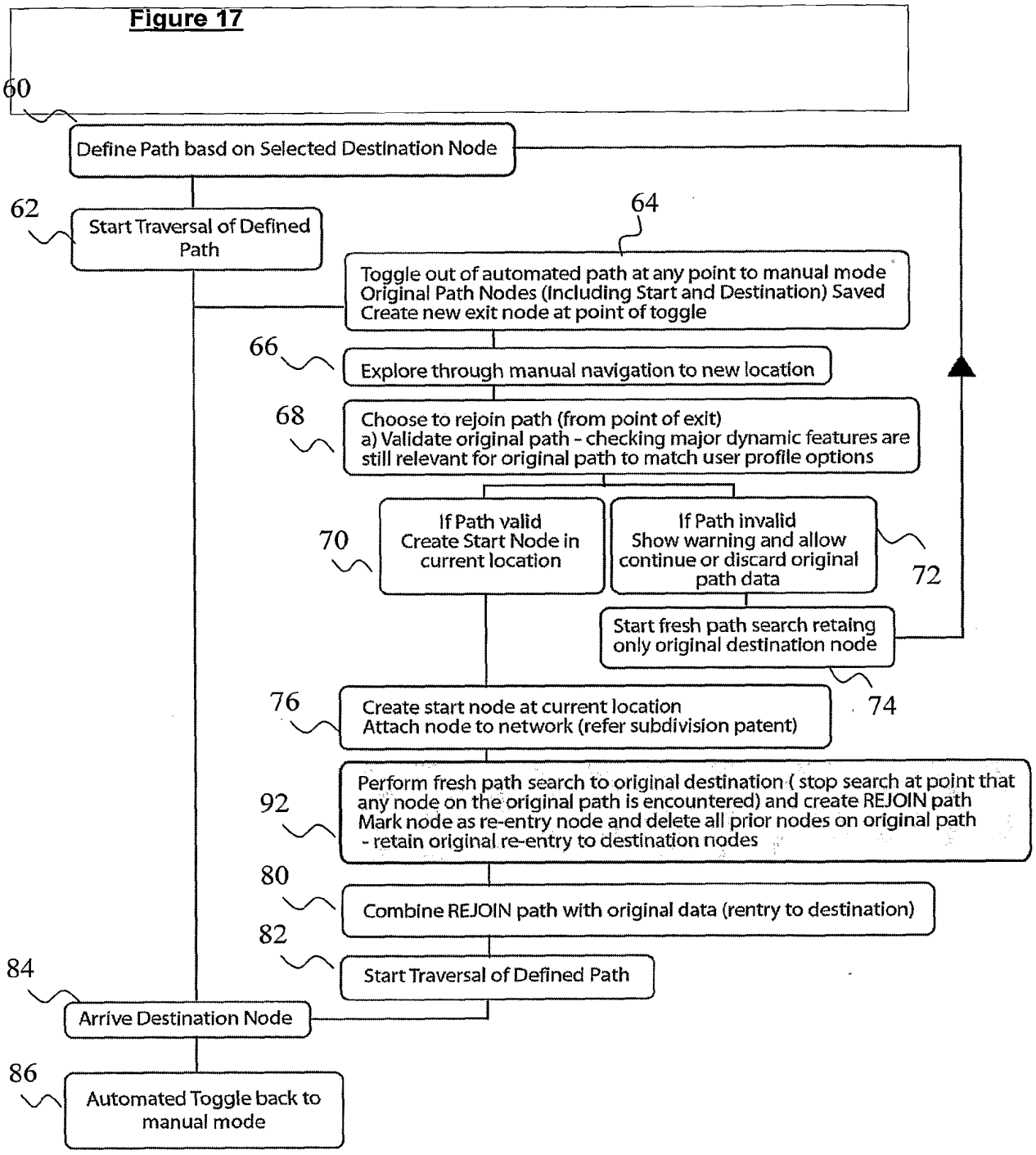

60
Define Path basd on Selected Destination Node
62
Start Traversal of Defined Path
64
Toggle out of automated path at any point to manual mode
Original Path Nodes (Including Start and Destination) Saved
Create new exit node at point of toggle
66
Explore through manual navigation to new location
68
Choose to rejoin path (from point of exit)
a) Validate original path - checking major dynamic features are still relevant for original path to match user profile options
70
If Path valid
Create Start Node in current location
If Path invalid
Show warning and allow continue or discard original path data
72
Start fresh path search retaing only original destination node
74
76
Create start node at current location
Attach node to network (refer subdivision patent)
92
Perform fresh path search to original destination (stop search at point that any node on the original path is encountered) and create REJOIN path
Mark node as re-entry node and delete all prior nodes on original path
- retain original re-entry to destination nodes
80
Combine REJOIN path with original data (rentry to destination)
82
Start Traversal of Defined Path
84
Arrive Destination Node
86
Automated Toggle back to manual mode

Figure 18

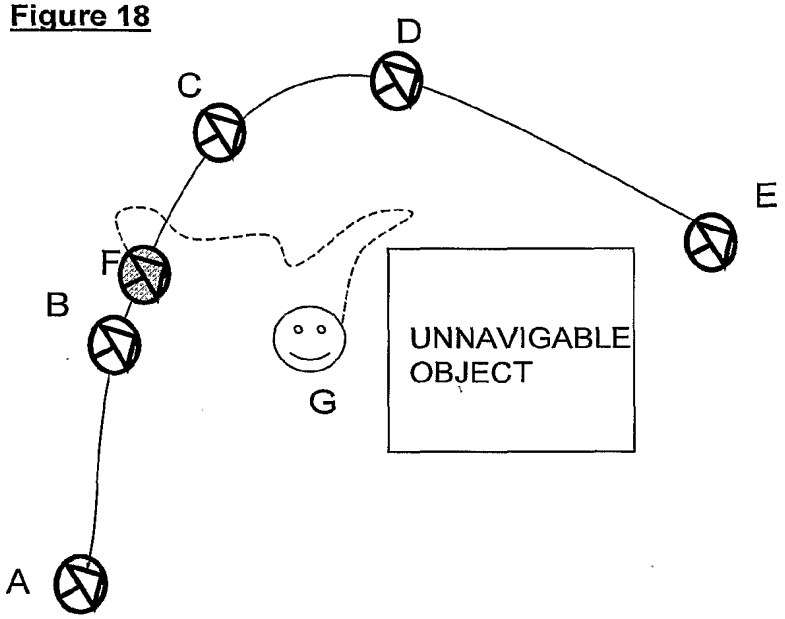
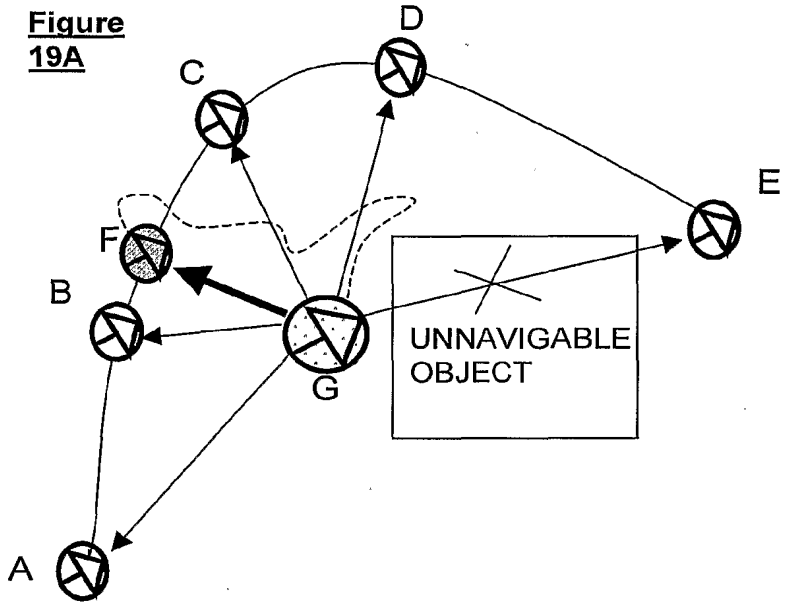


Figure 19A



NAVIGATIONAL NODE

Figure 19B

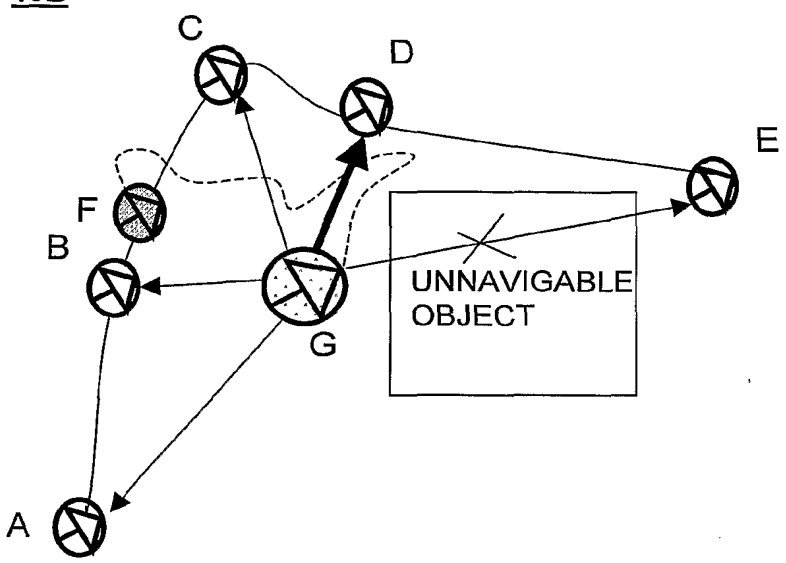


Figure 19C

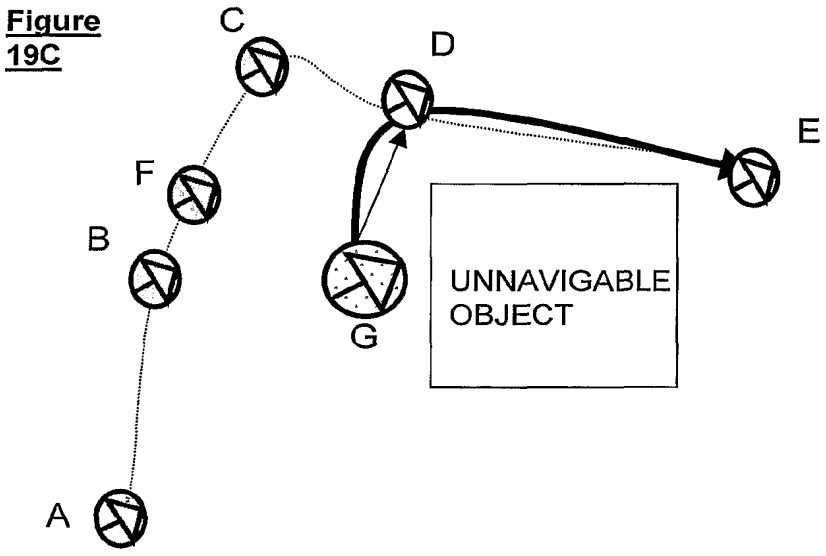


Figure 20A

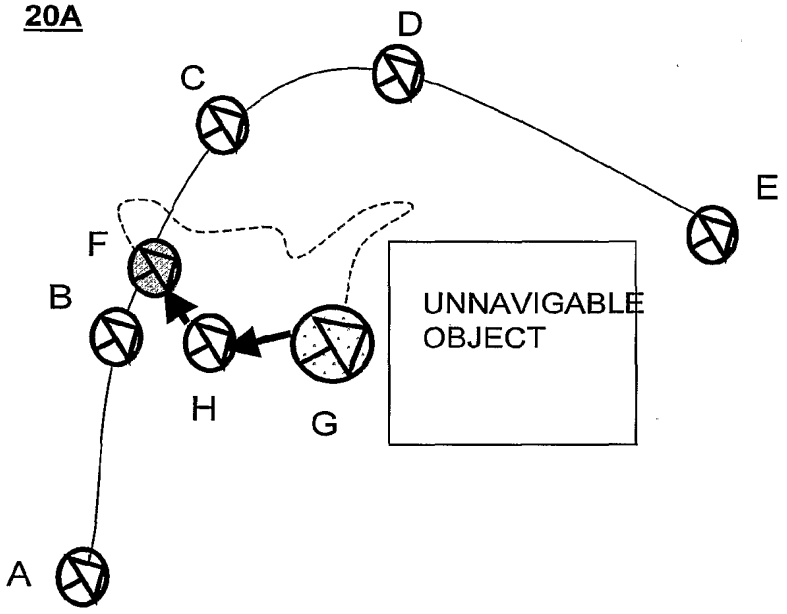


Figure 20B

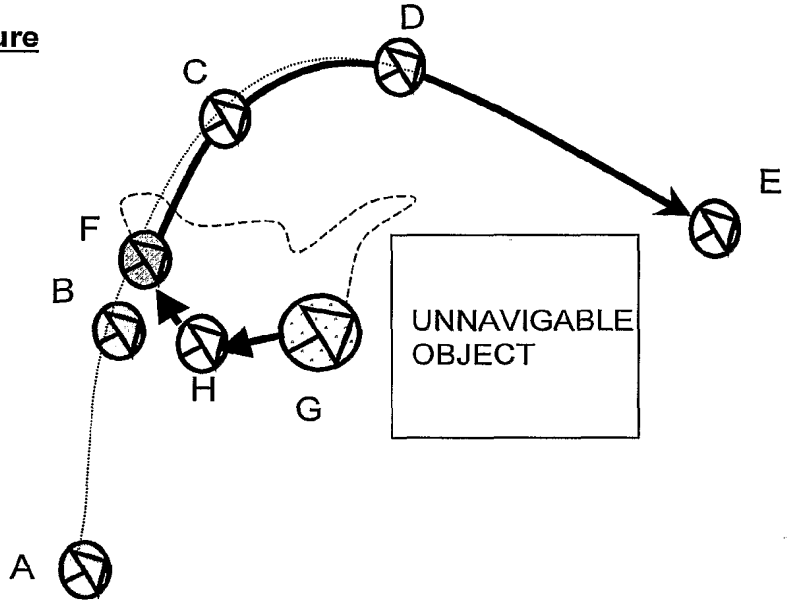


Figure 21

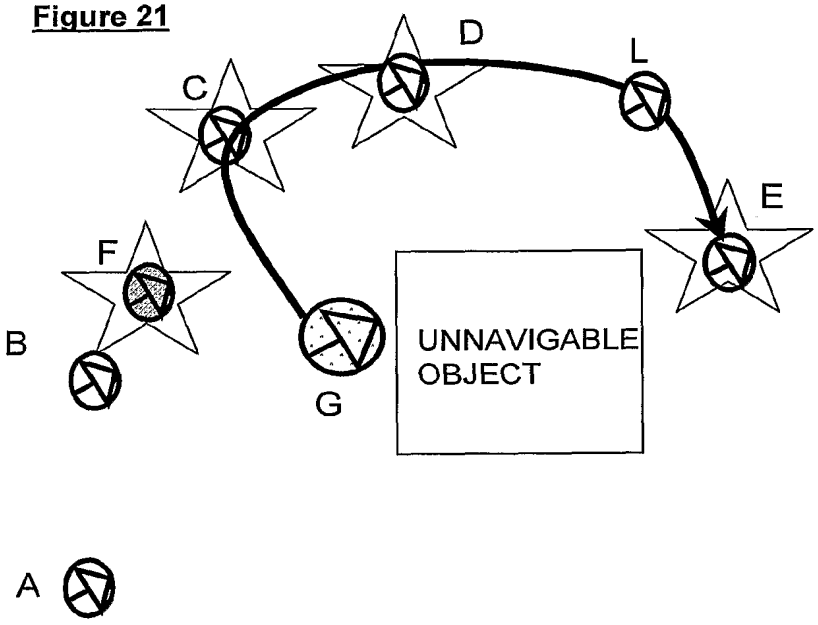
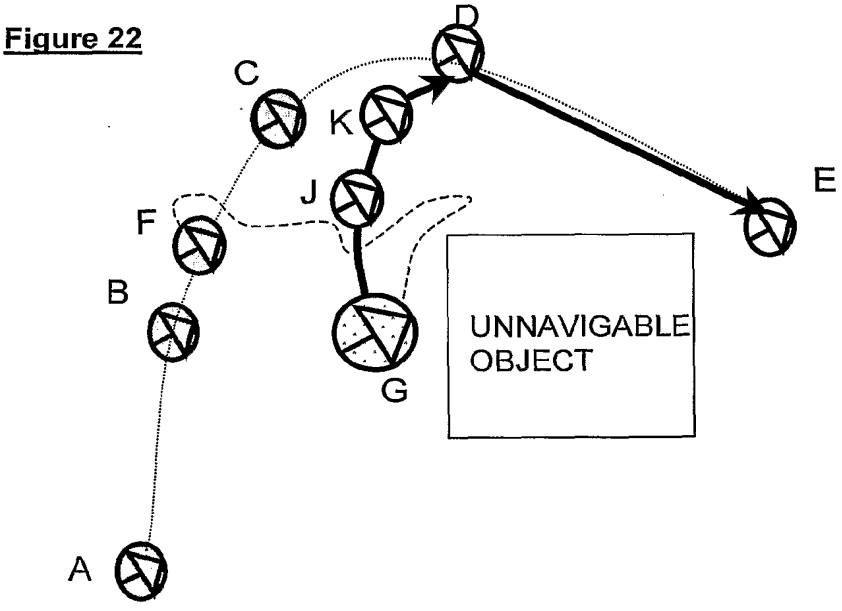



Figure 22